

What is claimed is:

1. A dynamo-electric machine comprising:

a rotor;

an inner yoke having a plurality of magnets secured to an inner peripheral surface of said inner yoke in such a manner that said magnets oppose an outer peripheral surface of said rotor; and

an outer yoke fitted around said inner yoke, wherein:

said outer yoke is made from at least one piece of plate material that has at least one pair of tongue and groove, said tongue being formed at one end of said plate material, and said groove being formed at the other end of said plate material in opposing relationship to said tongue, said outer yoke being formed into a cylindrical shape by engaging said tongue with said groove while said plate material is rolled into said cylindrical shape; and

said rotor and said inner yoke constitute a dynamo-electric machine main body, said dynamo-electric machine main body being fitted within said outer yoke such that said outer yoke is expanded radially outwardly by said dynamo-electric machine main body to secure said outer yoke to said inner yoke in tightly contacting relationship therewith.

2. A dynamo-electric machine according to claim 1, wherein:

said tongue is formed such that said tongue is displaceable within said groove with respect to said groove; and

said tongue and said groove are formed such that said tongue and said groove are more tightly engaged with each other when said outer yoke is expanded radially outwardly.

3. A dynamo-electric machine according to claim 1, wherein:

said tongue protrudes from an edge of said one end of said plate material; and

when said tongue and said groove are engaged with each other, said tongue and said groove are configured such that at least one of said tongue and said groove have a decreasing width that decreases toward said edge of said one end of said plate material.

4. A dynamo-electric machine according to claim 1, wherein:

a size of said groove is slightly larger than a size of said tongue; and

a clearance is present between said tongue and said groove when said tongue is engaged with said groove.

5. A dynamo-electric machine according to claim 1, wherein a shape of said tongue is substantially homothetic to a shape of said groove.

6. A dynamo-electric machine according to claim 1, wherein a connection between said tongue and said groove is placed substantially at a circumferential center of one of said plurality of magnets.

7. A dynamo-electric machine according to claim 1, wherein said outer yoke is constructed such that a space is present between said tongue and said groove when said dynamo-electric machine main body is not fitted within said outer yoke, said space being substantially eliminated when said dynamo-electric machine main body is fitted within said outer yoke.

8. A dynamo-electric machine according to claim 1, wherein said connection between said tongue and said groove is slightly deformed when said dynamo-electric machine main body is fitted within said outer yoke.

9. An outer yoke for a dynamo-electric machine having a housing, wherein:

said outer yoke is made from at least one piece of plate material that has at least one pair of tongue and groove, said tongue being formed at one end of said plate material, and said groove being formed at the other end of said plate material in opposing relationship to said tongue, said outer yoke being formed into a cylindrical shape by engaging said tongue with said groove while said plate material is rolled into said cylindrical shape; and

said outer yoke is formed to be expanded radially outwardly when said housing of said dynamo-electric machine is fitted within said outer yoke to secure said outer yoke to said housing of said dynamo-electric machine in tightly contacting relationship therewith.

10. An outer yoke according to claim 9, wherein:

said tongue is formed such that said tongue is displaceable within said groove with respect to said groove; and

said tongue and said groove are formed such that said tongue and said groove are more tightly engaged with each other when said outer yoke is expanded radially outwardly.

11. An outer yoke according to claim 9, wherein:

said tongue protrudes from an edge of said one end of said plate material; and

when said tongue and said groove are engaged with each other, said tongue and said groove are configured such that at least one of said tongue and said groove have a decreasing width that decreases toward said edge of said one end of said plate material.

12. An outer yoke according to claim 9, wherein:

a size of said groove is slightly larger than a size of said tongue; and

a clearance is present between said tongue and said groove when said tongue is engaged with said groove.

13. An outer yoke according to claim 9, wherein a shape of said tongue is substantially homothetic to a shape of said groove.

14. An outer yoke according to claim 9, wherein said outer yoke is constructed such that a space is present between said tongue

and said groove when said housing of said dynamo-electric machine is not fitted within said outer yoke, said space being substantially eliminated when said housing of said dynamo-electric machine is fitted within said outer yoke.

15. An outer yoke according to claim 9, wherein a connection between said tongue and said groove is slightly deformed when said housing of said dynamo-electric machine is fitted within said outer yoke.